# Public-private partnerships: The US perspective



#### At a glance

PPPs represent an untapped source of capital that could help address the current infrastructure funding gap. PPPs are best suited to complex, expensive, large-scale, long-term projects. Public perception issues have slowed transportation PPPs in the US, but the challenges are not insurmountable.



Public-private partnerships are complex, highly technical arrangements best suited to large-scale infrastructure assets with ongoing maintenance requirements. Wider adoption of PPPs in the US will require demonstrating to public officials and taxpayers alike the tangible benefits in cost savings and efficiency.

To rebuild its crumbling infrastructure, America may at last be ready to fully embrace public-private partnerships (PPPs)—out of necessity, convenience, or a combination of the two. Indeed, it may have little choice if it hopes to retain its competitive position in the world economy.

Many of the country's highways, bridges, rail lines, ports, and airports have either deteriorated to a state of disrepair or have become increasingly outdated. Public officials are obliged to consider timely, cost-effective alternative approaches to financing, building, operating, and maintaining infrastructure. Long-ignored structurally deficient infrastructure must first be repaired or replaced. Equally important is the pressing need to replace infrastructure that no longer serves its original purpose.

An important concern is identifying sources of short- and long-term funding. One viable option, widely used in Europe and other parts of the world to address infrastructure crises, is the use of public-private partnerships. Funding, of course, will be key to shoring up America's infrastructure. The Brookings Institution estimates

that the American Recovery and Reinvestment Act of 2009 authorizes an estimated \$126 billion for infrastructure.1 That's a good start, but the money can be stretched much further if government agencies partner with the private sector for additional financing. By some estimates, available private capital totals more than \$180 billion.2 "This number could be significantly higher if the government is forthcoming in its desire to forge true strategic long-term alliances with the private sector and is not just looking for a quick fix to monetize desperately needed projects," says Dr. Sotiris Pagdadis of the Capital Projects and Infrastructure Practice at PricewaterhouseCoopers and founder of Lambousa Infrastructures Consultancy Group.

In the last 18 to 24 months, "there have been deep losses in public pension funds, Taft-Hartley funds, endowments, and other managed funds. Many are, in fact, dramatically underfunded," says Leonard Shaykin, a managing

partner at LambdaStar Infrastructure Partners, a US labor-committed, middle-market fund investing in transportation, energy distribution, and waste and waste-water assets. "Many pension funds seem to be searching for safer, inflation-linked assets to place a portion of their assets," he says. "What better asset in an economic downturn and unclear future than hard real-estate assets generating current cash flow and providing some measure of inflation protection."

Public pension funds have begun allocating between 1 percent and 10 percent of their portfolios to public-private partnership projects, says Shaykin, adding, "More are committing every day. In five years this will be an established new asset class for pension fund managers." Pension funds currently view PPP investments in a variety of ways—as bond-like, as a realestate-related asset, as simply a private equity alternative investment, or as a new class of inflation-protected assets.<sup>3</sup>

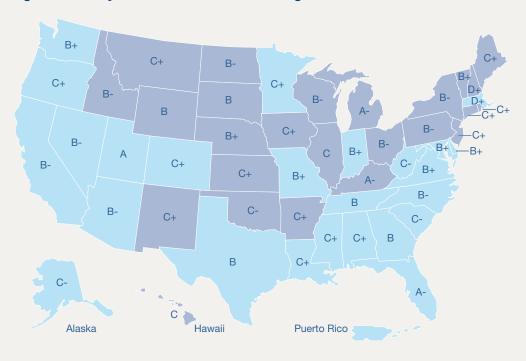
<sup>&</sup>lt;sup>1</sup> The Brookings Institution, *Metro Potential in ARRA: An Early Assessment of the American Recovery and Reinvestment Act*, March 2009.

<sup>&</sup>lt;sup>2</sup> Kearsarge Global Advisors et al., Benefits of private investment in infrastructure, 2009.

<sup>&</sup>lt;sup>3</sup> Interview with Leonard Shaykin, managing partner at LambdaStar Infrastructure Partners, October 12, 2009.

#### Meeting infrastructure needs is an ongoing challenge for states

Figure 1: Quality of infrastructure and PPP legislation



States with enabling legislation

A-D: Infrastructure quality grades assigned by The Pew Center on the States

Source: PricewaterhouseCoopers analysis based on data from The Pew Center on the States and the Federal Highway Administration

Figure 2: American Recovery and Reinvestment Act of 2009 total infrastructure distribution by state

Budget	State
Less than \$180M	DE, DC, HI, VT, NH, ME, RI, WY, ND, AK
\$180-\$420M	ID, SD, NV, WV, MT, UT, NE, NM, CT, OR, KS, AR, MS, IA, CO
\$420-\$690M	KY, LA, MD, MA, SC, OK, WA, MN, AL, AZ, WI, TN, MO, NJ, IN
\$690M-\$1B	VA, NC, MI, GA, IL, OH
More than \$1B	PA, NY, FL, TX, CA

Source: www.recovery.gov

"PPPs represent an intersection of cutting-edge finance, political and labor relations skills, real estate sophistication, and operating business skills. It is harder than it looks from the sidelines. But when it works, it's a win-win."

## Leonard Shaykin, LambdaStar Infrastructure Partners

While the economic crisis could delay some potential PPPs in the short term, it is placing significantly more pressure on financially strapped public officials to avoid tax increases and seek alternative ways of funding infrastructure improvements. "We need to fill the void as the gasoline tax becomes a declining revenue source," says Peggy Catlin, deputy executive director of the Colorado Department of Transportation. "Private-sector financing through PPPs is one way to get the job done. PPPs aren't a silver bullet but should definitely be considered as an option."4

John Veech, managing director at Morgan Stanley Infrastructure Partners, the global infrastructure investment fund sponsored by Morgan Stanley, agrees. He says, "It's really a question of what are the goals and objectives of the state or municipality. Some infrastructure assets should be run by government; others make more sense being run by the private sector."

Veech confirms what other investors have said about the growing appetite in the US for investment in public-private partnerships through infrastructure funds or, in some cases, direct investments by pension funds. Among the appealing factors of PPPs for pension funds,

endowments, and other investors are: assets of longer duration with a reasonably high element of current cash flow; the realization of a nice mix of current—and, ultimately, total—return on investment; relative stability compared with other investments such as real estate, private equity, and venture capital; and some inflation protection built into the revenue stream.

"There is strong to very strong interest among the investment community" in public-private infrastructure partnerships, Veech says. "In a world of volatility in the public markets, infrastructure investments provide relative stability."<sup>5</sup>

#### States explore PPPs

Some 25 US states already have PPP-enabling legislation in place, while others—including Ohio and Hawaii—are currently exploring such laws. Many other states, meanwhile, have begun to evaluate the need for such legislation. "The key is to understand what language such legislation should contain," says Pagdadis, "that is, whether legislators should seek enabling language, neutralizing language to a procurement framework, or to be descriptive of an enforcement framework." At a March 2010

Interview with Peggy Catlin, deputy executive director of the Colorado Department of Transportation, August 13, 2009.

<sup>&</sup>lt;sup>5</sup> Interview with John Veech, managing director at Morgan Stanley Infrastructure Partners, November 4, 2009.

## Legislation is necessary to enable PPPs because they typically require transacting a structured finance deal

Figure 3: Key features of PPP-enabling legislation by state

	Solicited and unsolicited proposals allowed	Local, state, or federal funds can be combined with private- sector funds	Various kinds of procurements allowed for project delivery <sup>†</sup>	Long-term leases/franchises granted by the public sector for construction, operation, and maintenance of toll facilities	Public sector has authority to issue toll revenue bonds or notes	Public sector agency can hire its own technical and legal consultants	Public sector outsources long- term operations and maintenance and other asset management duties to the private sector
AL				•			•
AK		•		•	•	•	•
AZ	•			•			•
CA	•		•	•			
СО	•	•	•	•	•	•	•
DE	•	•	•	•			•
FL	•	•	•	•	•	•	•
GA	•	•	•	•		•	•
IN		•	•	•	•	•	•
LA	•	•	•	•	•		•
MD	•		•	•		•	•
MN	•			•	•		•
MS	•	•	•	•	•	•	
МО	•		•	•	•		•
NV	•	•		•			•
NC	•	•	•	•	•	•	•
OR	•	•	•	•	•	•	•
SC					•		•
TN		•	•		•		•
TX	•	•	•	•	•	•	•
UT	•	•	•	•	•	•	•
VA	•	•	•	•		•	•
WA	•	•	•	•	•	•	•

<sup>†</sup>Examples include calls for projects, competitive requests for proposal, qualifications review followed by an evaluation of proposer concepts, use of design-build, procurements based on financial terms such as return on equity rather than on price, long-term asset leases for some period of up to 60 years or longer from the time operations commence.

Source: PricewaterhouseCoopers analysis based on Federal Highway Administration and US Department of Transportation data

meeting of the National Conference for State Legislatures in Washington, D.C., participants agreed that legislative language should call for tools to consider the most effective procurement framework before a project is procured using any one particular approach.

Without such legislation, counties, municipalities, regional transportation authorities, and even state agencies do not have the authority to move forward with the most effective method of procurement. This is especially true for public-private partnerships because they typically require transacting a structured finance deal (see Figure 3 on page 5). In Michigan, an office for PPPs has been created to advise state agencies and legislators.6 What's more, the governors of three of the most populous states spoke out publicly in an editorial in favor of PPPs. Governors David Paterson of New York, Arnold Schwarzenegger of California, and Ed Rendell of Pennsylvania wrote: "If we are to finance and build a world-class infrastructure for America, we must seek new solutions. And a promising solution is at hand: publicprivate partnerships." Indeed, in January 2008, Governors Rendell and Schwarzenegger, along with Mayor Bloomberg of New York City, announced a new coalition: Building America's Future (BAF). BAF serves as an advocacy group

70%

A 2009 study by the UK's National Audit Office found that nearly 70 percent of 114 PPPs were delivered on time. for public-private partnerships and alternative methods of procurement that focus on rebuilding America's national infrastructure. Currently, representatives from state and local government in 32 states belong to BAF.

Meanwhile, President Barack Obama has proposed \$4 billion in federal funding for a national infrastructure bank in his 2011 budget. For now, the US Department of Transportation's TIFIA (Transportation Infrastructure Finance and Innovation Act) has become a major source of loans and loan guarantees for transportation PPPs throughout the country since it took effect in 1998. If established, the infrastructure bank would be known as the National Infrastructure Innovation and Finance Fund and would serve a role similar to that of the European Investment Bank in the European Union, which jump-starts PPPs that are slow to get off the ground by kicking in seed money.8 Similarly, the Indian Infrastructure Finance Corporation Limited (IIFCL) bolsters PPPs at both the federal and state levels. For example, from July 2009 to December 2010, India's IIFCL expects to refinance 60 percent of commercial bank loans for PPPs in an effort to ease the liquidity crunch. The Indian government aims to increase investment in infrastructure to more than 9 percent of gross domestic product by 2014.9

Much of America's infrastructure certainly warrants immediate attention. The nation's infrastructure

needs hit home in dramatic fashion in 2007, when a busy highway bridge in Minneapolis collapsed into the Mississippi River and cost 13 people their lives. Beyond such human tragedy, the cold statistics show America lagging other countries in infrastructure quality. In a 2009-10 report, the World Economic Forum rated the US at No. 8 in the quality of its overall infrastructure—behind such countries as Germany and France, where public-private partnerships are fairly commonplace.10 Similarly, the American Society of Civil Engineers gave US infrastructure a D grade in its 2009 report card and estimated that \$2.2 trillion would be needed over five years to boost the grade to a B, only half of which is covered by budgeted spending.11 In fact, US infrastructure spending as a percentage of gross domestic product -2.4 percent - lags both Europe at 5 percent and China at 9 percent.12

### The success of international PPPs

It will not be easy for America to restore the lagging reputation of its infrastructure, but PPPs could serve as the catalyst for the long rebuilding process. Other nations with more robust infrastructure have compiled an impressive track record of pooling public and private sector expertise and financial resources. Their experiences can provide both encouragement and educational lessons for government officials in America.

<sup>&</sup>lt;sup>6</sup> The National Council for Public-Private Partnerships, "States Become Active in PPPs," NCPPP Insight, Summer 2009.

David Paterson, Arnold Schwarzenegger, Ed Rendell, "The Moment for Public-Private Partnerships is Now," http://www.huffingtonpost.com/gov-david-a-paterson/the-moment-for-public-pri\_b\_210972.html, posted June 3, 2009.

<sup>&</sup>lt;sup>8</sup> European Investment Bank, The EIB's Role In Public-Private Partnerships (PPPs), July 15, 2004.

<sup>&</sup>lt;sup>9</sup> PricewaterhouseCoopers, Budget 2009 Snapshot (India): Specific Proposals for the Road Sector, 2009.

<sup>&</sup>lt;sup>10</sup> World Economic Forum, *The Global Competitiveness Report 2009-2010*, September 2009.

<sup>&</sup>lt;sup>11</sup> American Society of Civil Engineers, Report Card for America's Infrastructure, 2009.

<sup>&</sup>lt;sup>12</sup> "The Cracks Are Showing," *The Economist,* June 28, 2008.

PPPs have frequently been used for highway construction, mass-transit development, airports, seaports, hospitals, schools, and utilities of all kinds, employing innovative schemes for financing, constructing and operating the asset. They got their start in the UK in the 1980swhere they are referred to as Private Finance Initiatives (PFIs)—and soon spread to other parts of Europe, Australia, Canada, South Africa, and various countries in Asia. Those nations have benefited in many ways from PPPs, including

Some countries are completely revisiting the relationship between the asset and the user of the asset. As a result, they are also rethinking how best to finance, build, and operate the asset. In the Netherlands, for example, where interest in PPPs is on the rise, the government hopes to involve the private sector in an innovative way to pay for road construction and maintenance that could reduce congestion and improve air quality. The Dutch Ministry of Transport plans to introduce road pricing

#### Canada Line is the first transit project in North America to be developed as a PPP; it was completed several months ahead of schedule in August 2009.

the timely completion of projects, transfer of risks to the most appropriate stakeholders, and high levels of accountability and transparency. These partnerships often result in considerable cost savings during the bidding process. For example, the winning Waldwei consortium for the N31 Leeuwarden-Drachten motorway in the Netherlands bid 30 percent below the public-sector estimate due to maintenance efficiencies that the private-sector partners could bring to the project.<sup>13</sup> Between 1999 and 2009, more than 700 PFI transactions were conducted in the UK alone, valued at \$98 billion, according to Partnerships UK, which was set up by the UK Treasury to act as an intermediary between the public and private sectors.

based on advanced satellite navigation technology that will cover more than 8 million vehicles and be implemented starting in 2012. The concept: gradually phase out current road taxes and the taxes imposed on vehicle sales, and replace them with a fairer, pay-asyou-drive system based on distance driven, time and place of travel, and type of vehicle. Such a payment plan aims to make drivers think twice before starting their engines. To make the ambitious, \$8.5 billion annual revenue-generating plan a reality, the government hopes private companies will compete to design, finance, produce, install, and maintain onboard units that would monitor a vehicle's journey. If the private sector doesn't participate, the transport ministry plans to develop the system itself.14

<sup>&</sup>lt;sup>13</sup> PricewaterhouseCoopers, Delivering the PPP Promise: A Review of PPP Issues and Activity, 2005.

<sup>14</sup> Martin Blokland and Fons Koop, "A New Dawn for PPPs: Improving Public Services in the Netherlands," PricewaterhouseCoopers Netherlands, 2009.

#### Why are PPPs attractive?

Public-private partnerships introduce significant efficiency and reliability, perhaps the most compelling argument for their use. They are also intrinsically transparent. As such, they have earned a strong reputation for the ability to deliver projects on time and without the typical cost overruns that plague many multiyear infrastructure projects—especially when multiple administrations, each with their own priorities, come and go during the lifespan of a project.

In a 2009 study of 114 PPPs, the UK's National Audit Office found that 69 percent were delivered on time and 65 percent came in within budget.15 In Australia, the financial advantage of PPPs has been well documented. The University of Melbourne conducted a study of 42 traditional procurement projects and 25 PPPs and concluded that PPPs provide far greater cost certainty. The researchers found that once the contract had been signed, PPPs had an average cost escalation of 4 percent, while traditional procurement projects had a much higher average cost escalation of 18 percent.16 In related research with the University of Melbourne, The Allen Consulting Group studied 21 PPPs and 33 traditional Australian projects and found the PPP cost advantage to be "economically and statistically significant." On a contracted \$4.5 billion of PPP projects, the firm said, the net cost overrun totaled only \$53 million. But for \$4.1 billion of traditional procurement projects, the net cost overrun amounted to \$618 million.<sup>17</sup>

To understand the benefits more clearly, consider the PPP project for Canada Line, a 12-mile regional rapid-transit rail line connecting downtown Vancouver, the Vancouver International Airport, and Central Richmond in British Columbia. Completed several months ahead of schedule in August 2009, Canada Line is the achievement of a private consortium that won a 35-year contract to design, build, partially finance, operate, and maintain the rapid-transit system.18 It is the first transit project in North America to be developed as a PPP. The net present value of the transaction in 2003-when the deal closed-was \$1.47 billion.

Before deciding to proceed with a PPP, officials studied such partnerships in Australia and the UK and conducted a "value for money" (VfM) analysis (see page 9 for more on VfM analysis). That type of analysis evaluates future cash flows to determine whether a capital project is best suited for a traditional public-procurement option or for a PPP. A VfM analysis can address efficiency by permitting transparency with accurate, fullcost pricing early in a project; encouraging competition from bidders; and clarifying project requirements and risk allocation, as well as the attendant rewards. It sometimes reveals, however, that a PPP is not always the right option.

In the case of Canada Line, the largest PPP transit project in North America, the VfM analysis found that the PPP option offered significantly higher value for money than public sector procurement. "We had a robust competitive

process and an extensive evaluation process conducted by a number of professionals," says Jane Bird, CEO of Canada Line Rapid Transit Inc., an independently governed subsidiary of the regional transportation authority. "We were confident at the end of the day that our partner had the necessary experience to manage the risks we assigned." She touts the PPP project as "the right model for this project at this time."

The key value factors in the winning PPP proposal were significantly lower construction costs and similar operating and maintenance costs, along with enhanced service and higher projected ridership and revenue. The consortium's proposed construction cost savings were equal to \$85 million in net present value. Lower costs were achieved partly through innovative tunnel design and a service plan that will generate more revenue from higher midday ridership. A combination of public and private monies funded construction. Over the life of the concession, operating revenues are expected to exceed operating costs to achieve agreed-upon return on investment (ROI). Both the public and private sector are satisfied that-given the transfer of risk to the private sector, the level of innovation introduced, and the overall efficiencies realized-ROI is warranted and attainable.

What lessons did Bird learn along the long road to the Canada Line's completion? "It's all about education; I can't overstate the need to continue to communicate and educate on both the government side and the public side" about PPPs, she says. "No issue is too

<sup>&</sup>lt;sup>15</sup> National Audit Office (UK), Performance of PFI Construction, October 2009.

<sup>&</sup>lt;sup>16</sup> Infrastructure Australia, National PPP Forum: Benchmarking Study, Phase II, December 17, 2008.

<sup>&</sup>lt;sup>17</sup> The Allen Consulting Group, Performance of PPPs and Traditional Procurement in Australia, 2007.

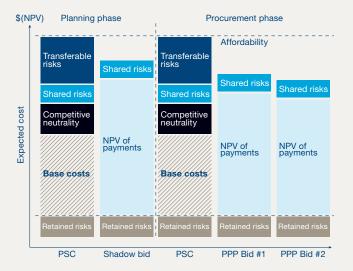
<sup>&</sup>lt;sup>18</sup> Jane Bird, *Metropolis Financing Urban Infrastructure*, June 15, 2006.

#### Value for money in public-private partnership decisions

A value for money (VfM) analysis evaluates future cash flows to determine whether a capital project is best suited to a traditional public-procurement option or a public-private partnership.

Conducted by multiple independent third parties with specialized operations, costing, and engineering expertise, a VfM assessment measures relative financial benefit. It also provides an audit trail that ensures public transparency (see Figure 4).

Figure 4: VfM analysis measures relative financial benefit



The public-sector comparator (PSC), a major component of VfM analysis, is a hypothetical, risk-adjusted cost estimate for a project, were that project to be financed, owned, and implemented by the public sector. Employing financial and statistical modeling techniques to estimate costs, it provides a baseline measure against which to compare future bids as well as a benchmark to measure value for money.

VfM analysis allocates, analyzes, quantifies, and simulates risk to better understand the project's risk profile, as illustrated in Figure 4: *retained risks* are retained by the public sector, *shared risks* are shared

by the public and private sectors in a PPP option, and *transferable risks* are transferred to the private sector in a PPP option.

The *base costs* in Figure 4 represent the actual costs before risk—on a net present value (NPV) basis—to the public sector, including design, construction, operations, maintenance, and asset rehabilitation. *Competitive neutrality* accounts for differences between the PSC and private procurement. For example, the public sector traditionally does not purchase insurance to cover routine operating risks; instead it pays the costs only if any routine operating risks actually occur. *NPV of payments* represents the payments the government would make to the private sector during a PPP transaction. These payments cover the design, construction, operations, maintenance, and rehabilitation of the assets. In the shadow bid and the PPP bids, *transferable risks* are included in the NPV of payments.

Figure 4 assesses value for money at two different stages of a PPP decision: planning and procurement. The PSC estimates the cost for the public sector to build and operate the asset, while the shadow bid represents a hypothetical estimate of comparable private sector costs. If the shadow bid shows a lower cost than the PSC during planning, then actual bids are received and compared against each other and the PSC during procurement.

VfM analysis allows well-informed, accurate, full-cost pricing early in a project. It also encourages competition from bidders, who are aware that a genuine benchmark exists that they will have to beat. By clarifying project requirements and risks, as well as offering a standard for decision making for the duration of procurement, the PSC can serve as a negotiating tool during the bidding stage of a PPP.

A requirement for all projects in the UK since the early 1990s, the public sector comparator is now standard practice in much of Australia. However, no uniform global method exists to calculate VfM analysis or simulate the public-sector comparator; standards vary by country.

small to manage." She also learned that "all politics is local," adding that people with specific, local issues can sometimes use the PPP approach to reinforce their positions. Bird said there was no major controversy surrounding the Canada Line project itself—it had been in regional and local transportation plans for decades. However, the PPP approach was new in the community and generated considerable debate at the regional government level; the regional government was a significant funding partner. In particular, Bird said, some publicsector unions tried to make PPPs an issue because they oppose private involvement in any services they believe are the government's responsibility. The unions "got some traction at the local level, but ultimately, nothing sufficient to detour the project," she said. Indeed, a few weeks after the opening of Canada Line, Bird reports a positive reaction from the public as well as ridership that is tracking at or ahead of anticipated levels.19

#### Benefits of risk transfer

Another positive attribute of PPPs is the transfer of risk among the participants. Much of the risk inherent in large infrastructure projects can be assigned to private-sector partners in a PPP, including the risks associated with design, construction, integration of various subcontractors, sourcing of funds, and overall operations and maintenance. In the case of Canada Line, the private consortium assumed the bulk of construction and operating risks, while the regional transportation authority bore property acquisition risk. During the operating period, the regional transportation authority will assume ridership revenue risk because it controls the transportation system and related marketing and is also responsible for setting fare levels and integrating train and bus schedules. By spreading risks to the parties best suited to manage them, costly complications are much less likely to crop up later to haunt public officials.

#### When PPPs make the most sense

Despite their many merits, however, PPPs aren't the optimal approach for every project. In fact, Pagdadis cautions that while the monetized value of the asset itself can be enticing, "it should not be the reason to enter into such a venture." Publicprivate partnerships are not always completely thought through because states in debt forge PPPs with a "trophy" asset to generate significant cash up front that can be used to support other desperately needed projects. This might well have been the case for the attempts to structure PPPs of Chicago's Midway Airport, the Pennsylvania Turnpike, and the New Jersey Turnpike. "The problem with monetization alone is that it creates suspicion in the minds of the public because the premise for advancing this form of procurement appears to be based on the wrong factors," says Pagdadis. "This also encourages states to enter into longer term concessions than they would normally feel comfortable entering into. The longer the concession period, the more up-front cash they can realize. A public asset in the hands of the private sector for an indeterminate amount of time simply creates unnecessary anxiety."

<sup>&</sup>lt;sup>19</sup> Interview with Jane Bird, CEO of Canada Line Rapid Transit Inc., September 2, 2009.

"There is no way to overstate the importance of early public involvement in the process and of giving context to private-sector participation."

#### -Chris Lippincott, Texas Department of Transportation

Generally, PPPs are best suited to complex and expensive largescale projects rather than simpler, short-term projects. PPPs involve substantial transaction costs that would typically rule out such smaller projects, whereas life-cycle costing and project management complexities in a decades-long project offer financial savings and long-term overall project efficiencies. In British Columbia, for example, the provincial government has mandated that all capital projects valued at \$48 million or more be assessed for PPP viability; the threshold in the Netherlands is about \$85 million.<sup>20, 21</sup>

The UK Treasury reports that PPPs are appropriate "where there are major and complex capital projects with significant ongoing maintenance requirements."22 Those characteristics certainly fit the M25 project, which will widen lanes, increase capacity, and improve access on the orbital motorway encircling London, one of the busiest roadways in Europe.

Even though the M25 seemed an ideal candidate for public-private partnership, it still underwent a business-case assessment that included a value for money

analysis. After the VfM analysis, a PPP was in fact deemed to be the best approach for the M25. Given the M25 project's design and construction complexities, a lengthy evaluation and negotiation ensued when the three short-listed bids were tendered. Eventually, a designbuild-finance-operate contract was awarded to special-purpose vehicle Connect Plus, which includes Swedish construction firm Skanska.23

The \$10 billion deal closed in May 2009, but only after some tense moments in nailing down the financing after the severe credit crunch developed in 2008. When it became clear that there was a real risk of insufficient capacity in the commercial banking markets, the UK Department for Transport stepped up and was prepared to provide up to 500 million British pounds of senior debt itself as a cofunder. Uncertainty about whether such government cofunding would be necessary remained until the end, when the deal was in fact oversubscribed. Widening of the first two sections of the M25 is expected to be completed in time for the start of the Olympic Games in London in 2012.24

<sup>&</sup>lt;sup>20</sup> Partnerships British Columbia, http://www.partnershipsbc.ca/documents/project\_overview22-jun-09.pdf.

<sup>&</sup>lt;sup>21</sup> Martin Blokland and Fons Koop, "A New Dawn for PPPs: Improving Public Services in the Netherlands," PricewaterhouseCoopers Netherlands, 2009.

<sup>&</sup>lt;sup>22</sup> HM Treasury, PFI: Meeting the Investment Challenge, July 2003.

<sup>&</sup>lt;sup>23</sup> US Department of Transportation Federal Highway Administration, *Public-Private Partnerships for* Highway Infrastructure: Capitalizing on International Experience, March 2009.

<sup>&</sup>lt;sup>24</sup> Paul Davies and John Carr, "The M25 PPP: The Challenges and Lessons of Large PPPs," PricewaterhouseCoopers LLP, June 10, 2009.

#### The best way to defuse negative perceptions will be to produce more successful PPPs.

Whether the ultimate choice is traditional public procurement or a PPP, a due-diligence analysis provides valuable insights. A report from the Georgia Institute of Technology comparing PPPs in Canada, the UK, the Netherlands, Hong Kong, Australia, and South Africa says, "It is important to note that the very exercise of conducting a value for money analysis helps an agency to develop better knowledge of the project and have a better grasp of the potential scenarios that can all unfold." The report goes on to say that the experience of costing a project early on using VfM analysis is a key management tool for public-sector agencies, making them more aware of the potential costs, risks, and other issues to consider before embarking on the planning and procurement phases of a project. In the UK, for example, the Treasury conducts value for money assessments at three different stages: during its annual budgeting process, when making the business case before the bidding process, and after bid submission to select a final candidate.25

#### Hurdles to overcome in America

Given their many positive attributes, why are PPPs still in their nascent stage in the US? For one thing, studies indicate that government

officials continue to harbor misgivings and misconceptions that PPP proponents must be prepared to address. Often, the reluctance to consider PPPs reflects a lack of understanding of the details, based on a dearth of comprehensive information. A 2009 survey by consulting firm Halcrow Inc. shows a clear correlation between experience and interest in PPPs. While 70 percent of 75 state and local officials surveyed know of projects outside their own states, 61 percent have had no direct PPP experience and don't fully understand the terms and benefits. But more than 90 percent of the surveyed state and local officials with experience with PPPs expressed interest in them.26

Still, three-quarters of the officials expressed ambivalence. Officials with knowledge of PPPs cited the difficulty of implementing and contracting such projects, while the inexperienced officials were worried about losing future cash flow from the projects and said that government manages transportation better than private companies do. Both groups also expressed concern about unacceptable profits made by private businesses at the expense of users, and inexperienced officials particularly worried that a private entity might skimp on maintenance and repairs to boost profits.27 But the economic

<sup>&</sup>lt;sup>25</sup> Dorothy Morallos and Adjo Amekudzi, "The State of the Practice of Value for Money Analysis in Comparing Public-Private Partnerships to Traditional Procurements," Public Works Management & Policy, October 2008.

<sup>&</sup>lt;sup>26</sup> McGraw-Hill Construction, Public-Private Partnership: Accelerating Transportation Infrastructure Investment, 2009.

<sup>&</sup>lt;sup>27</sup> "Time Is Right to Educate Government Officials on PPP, Survey Says," LBO Wire, Dow Jones & Company, Inc., May 8, 2009.

downturn isn't perceived as a major obstacle to more PPPs: 71 percent of the officials consider them just as attractive or more so today.

"The availability and access to tax-exempt municipal bonds to finance infrastructure projects has historically provided a mechanism in the US that is not readily available around the world," says Pagdadis, adding, "While this is a legitimate reason to consider traditional funding streams, proper due diligence of a project will look at the whole life-cycle cost of the project, not just the capital cost, and will subsequently determine the best way forward."

Public opinion is another hurdle to the spread of PPPs in the US. Some Americans view publicprivate partnerships with suspicion, particularly when partners from abroad are involved. Others fear foreign control of vital assets and other infrastructure systems. Like some public officials, they suspect that foreign or domestic private companies may end up reaping exorbitant profits and exploiting the government and consumers by charging ever-higher usage fees. Such public-perception issues have generally slowed the acceptance of more PPPs, at least in transportation. "It's very assetspecific," says Morgan Stanley's Veech, adding that parking facilities and the water supply, for example, aren't necessarily considered core

government functions. "Citizens generally don't care if the meter maid is hired by a private company," he says. On the other hand, "real 'trophy' assets often have a more complicated political dynamic. The New Jersey Turnpike, for example, is close to a cultural icon and evokes a wide range of opinions and emotions whenever the issue of selling it is raised."

Texas has encountered resistance to its PPP efforts, partly because of fears about losing state sovereignty over the roads and sacrificing national security, according to Chris Lippincott, a spokesman for the Texas Department of Transportation. "The debate has been skewed by misplaced anxiety, especially about foreign participation," he says. Indeed, in 2007, Texas limited the department's authority to create comprehensive development agreements (CDAs) that involve private partners. "There was a feeling," Lippincott says, "that Texas was moving too fast and too far and that we should call time out on private-sector partnerships. But we will continue to involve the private sector where it makes sense and is legal." Several Texas CDA projects involving managed toll lanes are proceeding with private-sector involvement.28

While public officials certainly must be sensitive to the public's reluctance to bring international partners into major US transportation

<sup>&</sup>lt;sup>28</sup> Interview with Chris Lippincott, spokesman for the Texas Department of Transportation, August 13, 2009.

#### The most successful public-private partnerships combine the best of public-sector governance with the most valuable of private-sector efficiencies.

projects, they may be able to put to rest unfounded fears about losing control of America's infrastructure to foreign companies and governments. A sound public communication strategy is essential: By communicating a PPP's benefits, such as the expected savings to taxpayers, and demonstrating the use of local labor and other resources in the project, they are more likely to win popular backing. Many officials also acknowledge that after years of underinvestment in infrastructure and the loss of expert tradespeople. engineers, and project managers, foreign companies are bringing new advances in construction methods. These advances directly benefit Americans while spurring new investment in technology, methodologies, and human resources by US engineering and construction firms. Of course, the best way to defuse negative perceptions will be to produce more successful PPPs. There is understandably concern about the unknown, but people will become more comfortable and accepting after they see some positive results in their communities. "Public support is often more easily secured if money is earmarked for a specific project or purpose, such as repairs for crumbling roads or bridges, rather than being utilized for general budgetary purposes," says Veech.

#### An open and accountable process

Some government officials also worry about accountability and transparency, given the highlevel profile and media publicity surrounding many PPPs. While such concerns are certainly valid, other countries have managed to keep the public's trust by balancing government stewardship with private participation. They pay close attention to safeguarding labor contracts and environmental standards, and they create a system of checks, balances, and controls for PPPs. Savvy government agencies also make sure that citizens become involved in the process early on and are kept up-todate as a PPP evolves.

Lippincott advises states to move carefully with PPPs and explain clearly the value of involving private companies and the limits on their participation. "There is no way to overstate the importance of early public involvement in the process and of giving context to privatesector participation," he says. "We have to do a better job of explaining that just because a foreign company collects tolls doesn't mean it owns the roads. The idea of a publicprivate partnership shouldn't be menacing if it is placed in the context of being just another way for the private sector to help us build what we need. After all, we contracted out road construction work to private companies long before public-private partnerships."

Organizations created specifically to protect the public interest, such as Partnerships BC in Canada and Partnerships Victoria in Australia, help to ensure transparency. Canadian and Australian project

information, for example, is available in detail on public websites. The online sites explain, among other things, why a PPP approach won out over the usual procurement process. In its study of Australian PPPs, The Allen Consulting Group concluded that they are far more transparent than traditional projects, based on the amount of available public data it uncovered in its own research.

As for the private-sector partners, they have a very strong motivation for accountability: Their financial success depends on the quality and timeliness of their project work and the long-term performance of the infrastructure services they provide. Little wonder, then, that investors consider PPPs among the most challenging and complicated deals they have encountered. Says Veech, "There is an operational component figuring out how you're going to run a particular infrastructure asset and determining the fundamental management structure—as well as a complicated legal overlay, political dynamics, and often intricate concession agreements. Taking six to nine months to prepare a bid is not uncommon."

In Florida, transportation department officials are holding the PPP consortium on a major highway improvement project in Broward County to a high performance standard by tying compensation to results. I-595 Express, LLC, the consortium created by ACS Infrastructure Development, was awarded the contract to serve as

the concessionaire to design, build, finance, operate, and maintain the project for 35 years. But the state says that the consortium will receive no compensation until the highway improvements are fully operational, thereby providing powerful incentives for meeting the fiveyear design and construction plan. In addition, performance-based availability payments will be made monthly during the operating period of the project, but the payments can be reduced if quality and performance requirements in the contract are not met and roadways are not available to traffic.29

"The I-595 project is so major that it would have taken years for the state to piece together on its own," says Leon Corbett, project finance manager at the Florida Department of Transportation. "By grouping the entire project into one effort as a PPP, we may have advanced its completion by 15 years." He considers PPPs "still in their infancy in Florida, with six requiring privatesector financing either under way or nearly completed, and several more in the procurement stage."30

To be sure, public-private partnerships are complex, highly technical arrangements that will require educating government officials and American taxpayers to the benefits and refuting any false notions they may have about the private sector's

motives. It's a matter of demonstrating to public officials and taxpayers alike the tangible benefits of PPPs in cost savings and efficient operation of transportation systems and other infrastructure. LambdaStar is currently in the process of privatizing the Harrisburg Parking Authority in Harrisburg, Pennsylvania, after having won the concession. Shaykin finds the privatization process "both interesting and complex." He says PPPs represent "an intersection of cutting-edge finance, political and labor relations skills, real estate sophistication, and operating business skills. It is harder than it looks from the sidelines. But when it works, it's a win-win."

Government agencies shouldn't rush into PPPs until they feel confident about them, but with proper counsel and guidance from PPP experts in the US and abroad, they can acquire the necessary knowledge to consider a partnership rather than rely solely on traditional and often inefficient and costlier approaches to infrastructure renewal. The most successful partnerships will combine strong political backing with rigorous public-sector oversight and provide the right balance of incentives and flexibility to attract participation from the most experienced market leaders in the private sector. Undoubtedly, PPPs can generate a win-win for both government and private-sector partners.

<sup>&</sup>lt;sup>29</sup> "I-595 Improvements, District 4, Project Overview," http://www.i-595.com/Public\_Documents/I-595%20Project%20Overview 08-04-09.pdf.

<sup>30</sup> Interview with Leon Corbett, project finance manager at the Florida Department of Transportation, August 14, 2009.

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